

KOSTELETZKYA DEPRESSA, SECTION *KOSTELETZKYA*
(MALVACEAE), NEW TO TEXAS

¹Stanley D. Jones, ²Gretchen D. Jones, & ¹J.K. Wipff

¹S.M. Tracy Herbarium (TAES), Department of Rangeland Ecology and Management, Texas A&M University, College Station, Texas 77843-2126 U.S.A

²Department of Biology, Texas A&M University, College Station, Texas 77843-3258 U.S.A.

ABSTRACT

Kosteletzkya depressa (L.) O. Blanchard, Fryxell, & Bates, section *Kosteletzkya* (Malvaceae) previously unreported in Texas has been found in Cameron County.

KEY WORDS: *Kosteletzkya*, *Kosteletzkya depressa*, section *Kosteletzkya*, Malvaceae, Texas

Kosteletzkya K. Presl, a genus of 17 species, occurs in the New World in North, Central, and South America, and in the Old World from Africa and Madagascar to Europe and Malesia (Fryxell 1988). *Kosteletzkya depressa* (L.) O. Blanchard, Fryxell, & Bates, section *Kosteletzkya*, was first described by Linnaeus (1753) as *Melochia depressa* L. Presl (1835) was the first to move it into the genus *Kosteletzkya*, but failed to use the oldest available specific epithet. Seven others followed in renaming this taxon, maintaining it in the genus *Kosteletzkya*, but it was not until 1978 that the oldest correct epithet was recognized by O. Blanchard, Fryxell, & Bates. For a detailed nomenclatural history, see Fryxell (1988).

Kosteletzkya depressa is reported from southern Florida, the Caribbean Islands, is widely distributed in México including Baja California, and also occurs in South America at least to Ecuador. Cory & Parks (1937), Correll & Johnston (1970), Gould (1975), Hatch *et al.* (1990), nor Richardson (1990) listed *K. depressa* as occurring in Texas, strongly suggesting that this is a recent introduction. Based on previously mapped distributions (Fryxell 1988),

the Cameron County station is approximately 200 air mi. (324 km) from the closest previously known station in southern Tamaulipas, México. There are now two species of *Kosteletzkya* represented in Texas. The following key differentiates them.

KEY TO TEXAS *KOSTELETZKYA*

1. Petals 8 to 12 mm long; calyx 4 to 8 mm long.
 *K. depressa* (L.) O. Blanchard, Fryxell, & Bates
1. Petals 30 to 45 mm long; calyx 8 to 13 mm long.
 *K. virginica* (L.) A. Gray

Our specimen is a robust tap rooted annual about 2 m tall with the lower stem having a conspicuous narrowly rhombic pattern of vasculature (at least when dry). It is much branched above with many diffuse leafy panicles spreading to about 1 m. Flowers are solitary in the leaf axils, rotate, whitish fading to pink. The staminal column is bright yellow. The specimen has stinging trichomes (especially along the lower portion of the plant). The trichomes are of two types, stellate and simple. The simple trichomes are appressed to ascending. The capsules have some scattered stellate trichomes with uncinata trichomes on the margins of the wings. The leaves are lanceolate to hastate with stellate pubescence on both surfaces. The leaves are reduced upwards.

Specimen collected: UNITED STATES. Texas: Cameron Co., 20 October 1991, *S. & G. Jones 7787 & J.K. Wipff* (BRIT,ob[O.J. Blanchard's personal herbarium],PAUH,pf[Paul A. Fryxell's personal herbarium],TEX). The population consists of about ten plants. The collection site is 3.5 mi. (5.7 km) south on Farm Road 1847 from its junction with Farm Road 106, SE of La Tina. The longitude is 97° 28' 00" W and the latitude is 26° 09' 50" N, E of Cross Lake referencing the Laguna Atascosa 7.5' Quad. sheet. The habitat is a low lying drainage area with permanent to semipermanent water with the elevation being about 10 feet (3 m) above sea level. The soils are in the Lomalta series of the Laredo-Olmito association and are specifically Lomalta clay (LM). Permeability is very slow, with the available water capacity low. The soil is dark gray to dark grayish brown, calcareous; slightly to moderately saline. The geology of the site is Alluvium formation (Qas) (Recent). Associated species include *Mimosa pigra* L., *Prosopis glandulosa* Torr., *Cyperus ochraceus* Vahl, *Marsilea macropoda* A. Br., *Borrichia frutescens* (L.) DC., *Polygonum* sp., *Paspalum* sp., and *Eleocharis* sp.

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